SEQUENCE LISTING

```
<110>
       O\Brien, Timothy J.
<120>
       TADG-15: An Extracellular Serine Protease
       Overexpressed in Carcinomas
<130>
       D6064CIP
       10-20-1999
<141>
       09/027,337
<150>
       02-20-1998
<151>
<160>
       98
<170>
       WORD 6.0.1 for Macintosh
<210>
       3147
<211>
<212>
       DNA
<213>
       Homo sapiens
<220>
<223>
       TADG-15
<400>
       1
                                                                      60
tcaagagcgg cctcggggta ccatggggag &gatcgggcc cgcaagggcg gagggggccc
                                                                     120
gaaggactte ggegegggae teaagtacaa cheeeggeae gagaaagtga atggettgga
ggaaggcgtg gagttcctgc cagtcaacaa cg\caagaag gtggaaaagc atggcccggg
                                                                     180
                                                                     240
gcgctgggtg gtgctggcag ccgtgctgat cgg&ctcctc ttggtcttgc tggggatcgg
cttcctggtg tggcatttgc agtaccggga cgtgdgtgtc cagaaggtct tcaatggcta
                                                                     300
                                                                     360
catgaggatc acaaatgaga attttgtgga tgcctacgag aactccaact ccactgagtt
tgtaagcctg gccagcaagg tgaaggacgc gctgaagctg ctgtacagcg gagtcccatt
                                                                     420
cctgggcccc taccacaagg agtcggctgt gacggccttc agcgagggca gcgtcatcgc
                                                                     480
ctactactgg tctgagttca gcatcccgca gcacctggt gaggaggccg agcgcgtcat
                                                                     540
ggccgaggag cgcgtagtca tgctgccccc gcgggcgcg\Diamond tccctgaagt cctttgtggt
                                                                     600
cacctcagtg gtggctttcc ccacggactc caaaacagta \cagaggaccc aggacaacag
                                                                     660
ctgcagcttt ggcctgcacg cccgcggtgt ggagctgatg &gcttcacca cgcccggctt
                                                                     720
ccctgacage ccctaceceg ctcatgeeeg ctgecagtgg gagegeggg gggaegeega
                                                                     780
ctcagtgctg agcctcacct tccgcagctt tgaccttgcg tcatgcgacg agcgcggcag
                                                                     840
cgacctggtg acggtgtaca acaccetgag ceceatggag cccdacgece tggtgcagtt
                                                                     900
gtgtggcacc taccetecet cetacaacet gacettecae teetacaga aegteetget
                                                                     960
catcacactg ataaccaaca ctgagcggcg gcatcccggc tttgagccca ccttcttcca 1020
gctgcctagg atgagcagct gtggaggccg cttacgtaaa gcccagggga cattcaacag 1080
cccctactac ccaggccact acccacccaa cattgactgc acatggaaca ttgaggtgcc 1140
caacaaccag catgtgaagg tgagcttcaa attcttctac ctgctggagc ccggcgtgcc 1200
tgcgggcacc tgccccaagg actacgtgga gatcaatggg gagaaatach gcggagagag 1260
gtcccagttc gtcgtcacca gcaacagcaa caagatcaca gttcgcttcc actcagatca 1320
gtectacace gacacegget tettagetga atacetetee taegacteea Atgacecatg 1380
cccggggcag ttcacgtgcc gcacggggcg gtgtatccgg aaggagctgc gatgtgatgg 1440
```

ctgggccgac tgcaccgacc acagcgatga gctcaactgc agttgcgacg ccggccacca 1500

```
gttcacgtgc aagaacaagt tetgcaagec cetettetgg gtetgcgaca gtgtgaacga 1560
ctgcggagac aacagcgacg agcaggggtg cagttgtccg gcccagacct tcaggtgttc 1620
caatqqqaag tqcctctcga aaaqccagca qtqcaatggg aaggacqact qtqqqqacqq 1680
gtccgacgag gcctcctgcc ccaaggtgaa cgtcgtcact tgtaccaaac acacctaccg 1740
ctgcctcaat gggctctgct tgagcaaggg caaccctgag tgtgacggga aggaggactg 1800
tagcgaggc tcagatgaga aggactgcga ctgtgggctg cggtcattca cgagacaggc 1860
tegtgt/tatt gggggcaegg atgeggatga gggegagtgg ceetggeagg taageetgea 1920
tgctctgggc cagggccaca tctgcggtgc ttccctcatc tctcccaact ggctggtctc 1980
tgccgcaca& tgctacatcg atgacagagg attcaggtac tcagacccca cgcagtggac 2040
ggccttcctg\ggcttgcacg accagagcca gcgcagcgcc cctggggtgc aggagcgcag 2100
geteaagege ateateteee acceptett caatgactte accttegact atgacatege 2160
gctgctggag dtggagaaac cggcagagta cagctccatg gtgcggccca tctgcctgcc 2220
ggacgcctcc catgtcttcc ctgccggcaa ggccatctgg gtcacgggct ggggacacac 2280
ccagtatgga ggactggcg cgctgatcct gcaaaagggt gagatccgcg tcatcaacca 2340
gaccacctgc gagaacctcc tgccgcagca gatcacgccg cgcatgatgt gcgtgggctt 2400
cctcagcggc ggcgtggact cctgccaggg tgattccggg ggacccctgt ccagcgtgga 2460
ggcggatggg cggatcttcc aggccggtgt ggtgagctgg ggagacggct gcgctcagag 2520
gaacaagcca ggcgtytaca caaggctccc tctgtttcgg gactggatca aagagaacac 2580
tggggtatag gggccgggc cacccaaatg tgtacacctg cggggccacc catcgtccac 2640
cccagtgtgc acgcctgcag gctggagact ggaccgctga ctgcaccagc gccccagaa 2700
catacactgt gaactcaatc tecagggete caaatetgee tagaaaacet etegetteet 2760
cagectecaa agtggagekg ggaggtagaa ggggaggaca etggtggtte taetgaeeca 2820
actgggggca aaggtttga& gacacagcct ccccgccag ccccaagctg ggccgaggcg 2880
cotttotota tatetoecte cectotetot aaggageage gogaaeggag etteggagee 2940
tecteagtga aggtggtggg getgeeggat etgggetgtg gggeeettgg geeaegetet 3000
tgaggaagec caggetegga gaccetgga aaacagaegg gtetgagaet gaaattgttt 3060
taccagetee cagggtggae ticagtgtgt gtatttgtgt aaatgggtaa aacaatttat 3120
                                                                  3147
ttcttttaa aaaaaaaaa aaaaaaa
<210>
<211>
       855
<212>
       PRT
<213>
       Homo sapiens
<220>
<223>
       TADG-15
<400>
       2
Met Gly Ser Asp Arg Ala Arg Lys Gly Gly Gly Pro Lys Asp
Phe Gly Ala Gly Leu Lys Tyr Asn Ser Arg His Glu Lys Val Asn
                                                        30
Gly Leu Glu Glu Gly Val Glu Phe Leu Pro Val Asn Asn Val Lys
                35
                                    40
                                                        45
Lys Val Glu Lys His Gly Pro Gly Arg Trp Val Val Leu Ala Ala
```

Val Leu Ile Gly Leu Leu Leu Val Leu Leu Gly Ile Gly Phe Leu

Val Trp His Leu Gln Tyr Arg Asp Val Arg Val Gl\n Lys Val Phe

Asn Gly Tyr Met Arg Ile Thr Asn Glu Asn Phe Val Asp Ala Tyr

70

85

100

75

105

65

95

	Glu	Asn'	Ser	Asn	Ser 110	Thr	Glu	Phe	Val	Ser 115	Leu	Ala	Ser	Lys	Val 120
	Lys	Asp	Ala	Leu		Leu	Leu	Tyr	Ser		Val	Pro	Phe	Leu	
	Pro'	Tyr	His	Lys		Ser	Ala	Val	Thr		Phe	Ser	Glu	Gly	
	Val	I	Ala	Tyr		Trp	Ser	Glu	Phe		Ile	Pro	Gln	His	
	Val	Glu	Glu	Ala		Arg	Val	Met	Ala		Glu	Arg	Val	Val	
	Leu	Pro	Aro	Arg		Arg	Ser	Leu	Lys		Phe	Vaļ	Val	Thr	
	Val	Val	Alà	Phe	Pro 200	Thr	Asp	Ser	Lys	Thr 205	Val	Gln	Arg	Thr	
	Asp	Asn	Ser	Cys	Ser 215	Phe	Gly	Leu	His	Ala 220	Arg	Gly	Val	Glu	
	Met	Arg	Phe	Thr	Thr 230	Pro	Gly	Phe	Pro	Asp 235	Ser	Pro	Tyr	Pro	Ala 240
	His	Ala	Arg	Cys	Gln 245	Trp	Ala	Leu	Arg	Gly 250	Asp	Ala	Asp	Ser	Val 255
					26À		*		_	265		Ser	_	_	270
					275					280		Leu			285
					290	/				295		Tyr		•	300
)	_				305					310		Leu			315
					320		1	`		325	_	Phe			330
/	ľ				335				,	340		Gly			345
V	_			_	350			'	`	355	_	Pro	_		360
,					365	_		_		370		Val			375
					380			_	`	₹85	_	Leu			390
					395		_			400		Val			405
					410					415		Val			420
				_	425					430		Asp			435
		_		_	440				-	445		Tyr	_		450
	<u> </u>		_		455				-	460		GlX.	\	-	465
					470	_	, -	_		475	_	Cys		_	480
					485	-				490	_	His			495
	Cys	пЛ2	ASN	гÀ2	500	Cys	гÀг	Pro	ьeu	505	rrp	Val	cys	ASP	Ser 510
									٠,						•

```
Val Asn Asp Cys Gly Asp Asn Ser Asp Glu Gln Gly Cys Ser Cys
Pro Ala Gln Thr Phe Arg Cys Ser Asn Gly Lys Cys Leu Ser Lys
                530
                                     535
Ser\Gln Gln Cys Asn Gly Lys Asp Asp Cys Gly Asp Gly Ser Asp
                 545
                                     550
Glu Ala Ser Cys Pro Lys Val Asn Val Val Thr Cys Thr Lys His
                 560
                                     565
Thr Tyr Arg Cys Leu Asn Gly Leu Cys Leu Ser Lys Gly Asn Pro
Glu Cys \Asp Gly Lys Glu Asp Cys Ser Asp Gly Ser Asp Glu Lys
                 590
                                     595
Asp Cys Asp Cys Gly Leu Arg Ser Phe Thr Arg Gln Ala Arg Val
                 605
                                     610
Val Gly Gly Thr Asp Ala Asp Glu Gly Glu Trp Pro Trp Gln Val
Ser Leu His Ala Leu Gly Gln Gly His Ile Cys Gly Ala Ser Leu
                                     640
                 635
Ile Ser Pro Ash Trp Leu Val Ser Ala Ala His Cys Tyr Ile Asp
                 650
                                     655
Asp Arg Gly Phe Arg Tyr Ser Asp Pro Thr Gln Trp Thr Ala Phe
                                     670
Leu Gly Leu His Aso Gln Ser Gln Arg Ser Ala Pro Gly Val Gln
                                     685
                 680
Glu Arg Arg Leu Lys Arg Ile Ile Ser His Pro Phe Phe Asn Asp
                 695
                                     700
                                                          705
Phe Thr Phe Asp Tyr Asp Ile Ala Leu Leu Glu Leu Glu Lys Pro
                 710
                                     715
Ala Glu Tyr Ser Ser Met Wal Arg Pro Ile Cys Leu Pro Asp Ala
                 725
                                     730
Ser His Val Phe Pro Ala Gly Lys Ala Ile Trp Val Thr Gly Trp
                 740
                                     745

star{\text{\o}}
ly His Thr Gln Tyr Gly Gly\Thr Gly Ala Leu Ile Leu Gln Lys
                 755
                                     760
                                                          765
Gly Glu Ile Arg Val Ile Asn Gln Thr Thr Cys Glu Asn Leu Leu
                 770
                                     775
Pro Gln Gln Ile Thr Pro Arg Met Met Cys Val Gly Phe Leu Ser
                 785
                                     790
Gly Gly Val Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Ser
Ser Val Glu Ala Asp Gly Arg Ile Phe Gln Ala Gly Val Val Ser
                 815
Trp Gly Asp Gly Cys Ala Gln Arg Asn Lys Pro Gly Val Tyr Thr
                 830
Arg Leu Pro Leu Phe Arg Asp Trp Ile Lys Glu Asn Thr Gly Val
                                     850
<210>
       3
```

<211> 256

<212> PRT

<213> Homo sapiens

```
<220>
       Hepsin
<\\23>
       3
Arg the Val Gly Gly Arg Asp Thr Ser Leu Gly Arg Trp Pro Trp
Gln Val Ser Leu Arg Tyr Asp Gly Ala His Leu Cys Gly Gly Ser
Leu Leu Ser Gly Asp Trp Val Leu Thr Ala Ala His Cys Phe Pro
                35
Glu Arg Asn Arg Val Leu Ser Arg Trp Arg Val Phe Ala Gly Ala
Val Ala Gln Ala Ser Pro His Gly Leu Gln Leu Gly Val Gln Ala
                65
Val Val Tyr His Gly Gly Tyr Leu Pro Phe Arg Asp Pro Asn Ser
Glu Glu Asn Ser\Asn Asp Ile Ala Leu Val His Leu Ser Ser Pro
                                     100
Leu Pro Leu Thr Glu Tyr Ile Gln Pro Val Cys Leu Pro Ala Ala
Gly Gln Ala Leu ValackslashAsp Gly Lys Ile Cys Thr Val Thr Gly Trp
                125
                                     130
Gly Asn Thr Gln Tyr Txr Gly Gln Gln Ala Gly Val Leu Gln Glu
                140
                                     145
Ala Arg Val Pro Ile Ile\Ser Asn Asp Val Cys Asn Gly Ala Asp
                155
Phe Tyr Gly Asn Gln Ile Lys Pro Lys Met Phe Cys Ala Gly Tyr
Pro Glu Gly Gly Ile Asp Ala\Cys Gln Gly Asp Ser Gly Gly Pro
                185
                                     190
Phe Val Cys Glu Asp Ser Ile Ser Arg Thr Pro Arg Trp Arg Leu
                200
                                     205
Cys Gly Ile Val Ser Trp Gly Thr\Gly Cys Ala Leu Ala Gln Lys
                215
                                     220
Pro Gly Val Tyr Thr Lys Val Ser Asp Phe Arg Glu Trp Ile Phe
                                     235
                                                          240
Gln Ala Ile Lys Thr His Ser Glu Ala\Ser Gly Met Val Thr Gln
Leu
<210>
<211>
       225
<212>
       PRT
<213>
       Homo sapiens
<220>
<223>
       SCCE
<400>
Lys Ile Ile Asp Gly Ala Pro Cys Ala Arg Gly Ser His\Pro Trp
```

```
Gln Val Ala Leu Leu Ser Gly Asn Gln Leu His Cys Gly Gly Val
Leu Val Asn Glu Arg Trp Val Leu Thr Ala Ala His Cys Lys Met
Asn Glu Tyr Thr Val His Leu Gly Ser Asp Thr Leu Gly Asp Arg
Arg Ala Gln Arg Ile Lys Ala Ser Lys Ser Phe Arg His Pro Gly
Tyr Ser Thr Gln Thr His Val Asn Asp Leu Met Leu Val Lys Leu
Asn Ser Gin Ala Arg Leu Ser Ser Met Val Lys Lys Val Arg Leu
                95
                                     100
Pro Ser Arg\Cys Glu Pro Pro Gly Thr Thr Cys Thr Val Ser Gly
                                     115
                110
                                                          120
Trp Gly Thr Thr Thr Ser Pro Asp Val Thr Phe Pro Ser Asp Leu
                125
Met Cys Val Asp Val Lys Leu Ile Ser Pro Gln Asp Cys Thr Lys
                                     145
                                                          150
Val Tyr Lys Asp Neu Leu Glu Asn Ser Met Leu Cys Ala Gly Ile
                                     160
Pro Asp Ser Lys Lys Asn Ala Cys Asn Gly Asp Ser Gly Gly Pro
                170
                                     175
Leu Val Cys Arg Gly Thr Leu Gln Gly Leu Val Ser Trp Gly Thr
                                                          195
Phe Pro Cys Gly Gln Pr& Asn Asp Pro Gly Val Tyr Thr Gln Val
                200
                                     205
Cys Lys Phe Thr Lys Trp \[\frac{1}{4}le Asn Asp Thr Met Lys Lys His Arg
                215
<210>
       5
<211>
       225
<212>
       PRT
<213>
       Homo sapiens
<220>
<223>
       Trypsin
<400>
       5
Lys Ile Val Gly Gly Tyr Asn Cys Glu Gla Asn Ser Val Pro Tyr
Gln Val Ser Leu Asn Ser Gly Tyr His Phe &ys Gly Gly Ser Leu
Ile Asn Glu Gln Trp Val Val Ser Ala Gly His Cys Tyr Lys Ser
                35
Arg Ile Gln Val Arg Leu Gly Glu His Asn Ile Glu Val Leu Glu
Gly Asn Glu Gln Phe Ile Asn Ala Ala Lys Ile Ile\Arg His Pro
Gln Tyr Asp Arg Lys Thr Leu Asn Asp Ile Met Lau Ile Lys
Leu Ser Ser Arg Ala Val Ile Asn Ala Arg Val Ser Thr \lambdale Ser
                                     100
                                                          105
                             SEQ-6
```

```
Leu Pro Thr Ala Pro Pro Ala Thr Gly Thr Lys Cys Leu Ile Ser
                110
                                     115
Gly Trp Gly Asn Thr Ala Ser Ser Gly Ala Asp Tyr Pro Asp Glu
                125
                                     130
Deu Gln Cys Leu Asp Ala Pro Val Leu Ser Gln Ala Lys Cys Glu
                140
                                     145
Ala\Ser Tyr Pro Gly Lys Ile Thr Ser Asn Met Phe Cys Val Gly
                155
                                     160
Phe Lèu Glu Gly Gly Lys Asp Ser Cys Gln Gly Asp Ser Gly Gly
                170
                                     175
Pro Val\Val Cys Asn Gly Gln Leu Gln Gly Val Val Ser Trp Gly
                185
                                     190
Asp Gly Cys Ala Gln Lys Asn Lys Pro Gly Val Tyr Thr Lys Val
                200
                                     205
Tyr Asn Tyr Val Lys Trp Ile Lys Asn Thr Ile Ala Ala Asn Ser
                215
                                     220
<210>
       6
       231
<211>
<212>
       PRT
<213>
       Homo sapiens
<220>
<223>
       Chymotrypsin
<400>
Arg Ile Val Asn Gly Glu Asp Ala Val Pro Gly Ser Trp Pro Trp
	ilde{	t G}In Val Ser Leu Gln Asp L{	t Y}s Thr Gly Phe His Phe Cys Gly Gly
Ser Leu Ile Ser Glu Asp Trp\Val Val Thr Ala Ala His Cys Gly
                35
Val Arg Thr Ser Asp Val Val Val Ala Gly Glu Phe Asp Gln Gly
Ser Asp Glu Glu Asn Ile Gln Val\Leu Lys Ile Ala Lys Val Phe
Lys Asn Pro Lys Phe Ser Ile Leu Thr Val Asn Asn Asp Ile Thr
Leu Leu Lys Leu Ala Thr Pro Ala Arg Phe Ser Gln Thr Val Ser
Ala Val Cys Leu Pro Ser Ala Asp Asp Phe Pro Ala Gly Thr
                110
Leu Cys Ala Thr Thr Gly Trp Gly Lys Thr Lys Tyr Asn Ala Asn
Lys Thr Pro Asp Lys Leu Gln Gln Ala Ala Let Pro Leu Leu Ser
                140
                                                          150
                                     145
Asn Ala Glu Cys Lys Lys Ser Trp Gly Arg Arg Me Thr Asp Val
                155
                                     160
Met Ile Cys Ala Gly Ala Ser Gly Val Ser Ser Cys Met Gly Asp
                170
                                     175
Ser Gly Gly Pro Leu Val Cys Gln Lys Asp Gly Ala Trp Thr Leu
                185
                                     190
                                                          195
```

```
Val Gly Ile Val Ser Trp Gly Ser Asp Thr Cys Ser Thr Ser Ser
                                                          210
Pro Gly Val Tyr Ala Arg Val Thr Lys Leu Ile Pro Trp Val Gln
                215
                                     220
Lys Ile Leu Ala Ala Asn
<210≽
<211>
       255
<212>
       PRT
<213>
       Homo sapiens
<220>
       Factor 7
<223>
<400>
Arg Ile Val Gly Gly Lys Val Cys Pro Lys Gly Glu Cys Pro Trp
Gln Val Leu Leu Leu Val Asn Gly Ala Gln Leu Cys Gly Gly Thr
                                     25
Leu Ile Asn Thr Ile Trp Val Val Ser Ala Ala His Cys Phe Asp
Lys Ile Lys Asn Trp Arg Asn Leu Ile Ala Val Leu Gly Glu His
Asp Leu Ser Glu His Ask Gly Asp Glu Gln Ser Arg Arg Val Ala
                65
Gln Val Ile Ile Pro Ser Thr Tyr Val Pro Gly Thr Thr Asn His
                80
                                     85
lphasp Ile Ala Leu Leu Arg Lelpha His Gln Pro Val Val Leu Thr Asp
                                     100
His Val Val Pro Leu Cys Leu Aro Glu Arg Thr Phe Ser Glu Arg
                110
                                     115
Thr Leu Ala Phe Val Arg Phe Sen Leu Val Ser Gly Trp Gly Gln
                125
                                     130
Leu Leu Asp Arg Gly Ala Thr Ala Deu Glu Leu Met Val Leu Asn
                140
                                     145
Val Pro Arg Leu Met Thr Gln Asp Cys\Leu Gln Gln Ser Arg Lys
                                                          165
Val Gly Asp Ser Pro Asn Ile Thr Glu Tyr Met Phe Cys Ala Gly
                170
Tyr Ser Asp Gly Ser Lys Asp Ser Cys Lys Gly Asp Ser Gly Gly
                185
                                     190
Pro His Ala Thr His Tyr Arg Gly Thr Trp Tyr Leu Thr Gly Ile
                200
                                     205
Val Ser Trp Gly Gln Gly Cys Ala Thr Val Gly His Phe Gly Val
                                                          225
Tyr Thr Arg Val Ser Gln Tyr Ile Glu Trp Leu Gla Lys Leu Met
                230
                                     235
Arg Ser Glu Pro Arg Pro Gly Val Leu Leu Arg Ala Rro Phe Pro
                                     250
```

```
<210>
       8
<211>
       253
 $212>
       PRT
<2\13>
       Homo sapiens
<22`Q>
       Tissue plasminogen activator
<223≯
<400>
Arg Ile\Lys Gly Gly Leu Phe Ala Asp Ile Ala Ser His Pro Trp
Gln Ala Ala Ile Phe Ala Lys His Arg Arg Ser Pro Gly Glu Arg
Phe Leu Cys Gly Gly Ile Leu Ile Ser Ser Cys Trp Ile Leu Ser
                35
Ala Ala His Cys Phe Gln Glu Arg Phe Pro Pro His His Leu Thr
Val Ile Leu Gly Arg Thr Tyr Arg Val Val Pro Gly Glu Glu Glu
Gln Lys Phe Glu Val Glu Lys Tyr Ile Val His Lys Glu Phe Asp
Asp Asp Thr Tyr Asp Asn Asp Ile Ala Leu Leu Gln Leu Lys Ser
                95
                                     100
Asp Ser Ser Arg Cys Ala Gln Glu Ser Ser Val Val Arg Thr Val
                110
                                     115
Cys Leu Pro Pro Ala Asp\Leu Gln Leu Pro Asp Trp Thr Glu Cys
                                     130
Glu Leu Ser Gly Tyr Gly Lys His Glu Ala Leu Ser Pro Phe Tyr
                140
                                     145
Ser Glu Arg Leu Lys Glu Ala\His Val Arg Leu Tyr Pro Ser Ser
                155
                                     160
Arg Cys Thr Ser Gln His Leu Leu Asn Arg Thr Val Thr Asp Asn
                170
                                     175
Met Leu Cys Ala Gly Asp Thr Arg\Ser Gly Gly Pro Gln Ala Asn
                                                          195
Leu His Asp Ala Cys Gln Gly Asp Sex Gly Gly Pro Leu Val Cys
                200
                                                          210
Leu Asn Asp Gly Arg Met Thr Leu Val Gly Ile Ile Ser Trp Gly
Leu Gly Cys Gly Gln Lys Asp Val Pro Glx Val Tyr Thr Lys Val
                230
                                                          240
Thr Asn Tyr Leu Asp Trp Ile Arg Asp Asn Met Arg Pro
<210>
<211>
       2900
<212>
       DNA
<213>
       Homo sapiens
<220>
```

cgctgggtgg tgctggcagc cgtgctgatc ggcctcctct tggtcttgct ggggatcggc 60 ttcctggtgt ggcatttgca gtaccgggac gtgcgtgtcc agaaggtctt caatggctac 120 atgaggatca caaatgagaa ttttgtggat gcctacgaga actccaactc cactgagttt 180 glaagectgg ccagcaaggt gaaggacgcg ctgaagctgc tgtacagcgg agtcccattc 240 ctggcccct accacaagga gtcggctgtg acggccttca gcgagggcag cgtcatcgcc 300 tactactggt ctgagttcag catecegeag cacetggttg aggaggeega gegegteatg 360 gccaggagcg cgtagtcatg ctgcccccgc gggcgcgctc cctgaagtcc tttgtggtca 420 cctcagtggt ggctttcccc acggactcca aaacagtaca gaggacccag gacaacagct 480 geagettigg cetgeacgee geggtgtgga getgatgege tteaccaege eggetteeet 540 gacagecedt acceegetea tgeeegetge eagtgggetg egggggaegeg acgeagtget 600 gagetacteg agetgaeteg eagettgaet gegeetegae gagegeggea gegaeetggt 660 gacgtgtaca\acaccctgag ccccatggag ccccacgcct ggtgagtgtg tggcacctac 720 780 cctccctcct àcaacctgac cttccactcc ctcccacgaa cgtcctgctc atcacactga taaccaacac t@acgcggca tcccggcttt gaggccacct tcttccagct gcctaggatg 840 900 agcagetgtg gaggecgett aegtaaagee caggggacat teaacageee etaetaeeea ggccactacc cacocaacat tgactgcaca tggaaaattg aggtgcccaa caaccagcat 960 gtgaaggtgc gcttdaatt cttctacctg ctggagcccg gcgtgcctgc gggcacctgc 1020 cccaaggact acgtg@agat caatggggag aaatactgcg gagagaggtc ccagttcgtc 1080 gtcaccagca acagcaacaa gatcacagtt cgcttccact cagatcagtc ctacaccgac 1140 accggettet tagetgaata cetetectae gaetecagtg acceatgece ggggeagtte 1200 acgtgccgca cggggcggtk tatccggaag gagctgcgct gtgatggctg ggcgactgca 1260 ccgaccacag cgatgagctc\aactgcagtt gcgacgccgg ccaccagttc acgtgcaaga 1320 gcaagttetg caagetette tgggtetgeg acagtgtgaa cgagtgegga gacaacageg 1380 acgagcaggg ttgcatttgt còggacccag accttcaggt gttccaatgg gaagtgcctc 1440 tegaaaagee ageagtgeaa tgggaaggae gaetgtgggg aegggteega egaggeetee 1500 tgccccaagg tgaacgtcgt cacttgtacc aaacacacct accgctgcct caatgggctc 1560 tgcttgagca agggcaaccc tgagtgtgac gggaaggagg actgtagcga cggctcagat 1620 gagaaggact gcgactgtgg gctgcggtca ttcacgagac aggctcgtgt tgttgggggc 1680 acggatgcgg atgagggcga gtggccctgg caggtaagcc tgcatgctct gggccagggc 1740 cacatetgeg gtgetteeet catetete&c aactggetgg tetetgeege acaetgetae 1800atcgatgaca gaggattcag gtactcagad cccacgcagg acggccttcc tgggcttgca 1860 cgaccagage cagegeagge cetggggtge aggagegeag geteaagege ateatetece 1920 acceptett caatgactic accitegact atgacatege getgetggag etggagaaac 1980 eggeagagta cagetecatg gtgeggeeca tekgeetgee ggaegeetge catgtettee 2040 ctgccggcaa ggccatctgg gtcacgggct ggggacacac ccagtatgga ggcactggcg 2100 cgctgatcct gcaaaagggt gagatccgcg tcat&aacca gaccacctgc gagaacctcc 2160 tgccgcagca gatcacgccg cgcatgatgt gcgtgggctt cctcagcggc ggcgtggact 2220 cctgccaggg tgattccggg ggacccctgt ccagcgtgga ggcggatggg cggatcttcc 2280 aggccggtgt ggtgagctgg ggagacgctg cgctcagagg aacaagccag gcgtgtacac 2340 aaggeteeet etgttteggg aatggateaa agagaacaek ggggtatagg ggeeggggee 2400 acccaaatgt gtacacctgc ggggccaccc atcgtccacc\ccagtgtgca cgcctgcagg 2460 ctggagactc gcgcaccgtg acctgcacca gcgccccaga acatacactg tgaactcatc 2520 tccaggctca aatctgctag aaaacctctc gcttcctcag catccaaagt ggagctggga 2580 gggtagaagg ggaggaacac tggtggttct actgacccaa ctggggcaag gtttgaagca 2640 cageteegge ageecaagtg ggegaggaeg egtttgtgea tactgeeetg etetataeae 2700 ggaagacetg gatetetagt gagtgtgaet geeggatetg getgtgtee ttggeeaege 2760 ttcttgagga agcccaggct cggaggaccc tggaaaacag acgggtctga gactgaaaat 2820 ggtttaccag ctcccaggtg acttcagtgt gtgtattgtg taaatgagta aaacatttta 2880 tttctttta aaaaaaaaa 2900

```
<210>
       10
<211>
       922
 :ጀ12>
       PRT
<21\3>
       Mus musculus
<220
<223>
       Epithin
<400>
Met Gly Ser Asn Arg Gly Arg Lys Ala Gly Gly Gly Ser Gln Asp
Phe Gly Ala Gly Leu Lys Tyr Asp Ser Arg Leu Glu Asn Met Asn
Gly Phe Glu\Glu Gly Val Glu Phe Leu Pro Ala Asn Asn Ala Lys
Lys Val Glu Lixs Arg Gly Pro Arg Arg Trp Val Val Leu Val Ala
Val Leu Phe Ser\Phe Leu Leu Leu Ser Leu Met Ala Gly Leu Leu
Val Trp His Phe His Tyr Arg Asn Val Arg Val Gln Lys Val Phe
Asn Gly His Leu Arg\Ile Thr Asn Glu Ile Phe Leu Asp Ala Tyr
                95
                                     100
Glu Asn Ser Thr Ser Thr Glu Phe Ile Ser Leu Ala Ser Gln Val
                110
Lys Glu Ala Leu Lys Leu\Leu Tyr Asn Glu Val Pro Val Leu Gly
                125
                                     130
                                                          135
Pro Tyr His Lys Lys Ser Ala Val Thr Ala Phe Ser Glu Gly Ser
                140
                                     145
Val Ile Ala Tyr Tyr Trp Ser Glu Phe Ser Ile Pro Pro His Leu
                155
                                     160
Ala Glu Glu Val Asp Arg Ala Met Ala Val Glu Arg Val Val Thr
                170
                                     175
Leu Pro Pro Arg Ala Arg Ala Leu Nys Ser Phe Val Leu Thr Ser
                185
                                     190
                                                          195
Val Val Ala Phe Pro Ile Asp Pro Arg Met Leu Gln Arg Thr Gln
                200
                                     205
Asp Asn Ser Cys Ser Phe Ala Leu His Ala His Gly Ala Ala Val
                215
Thr Arg Phe Thr Thr Pro Gly Phe Pro Asn\Ser Pro Tyr Pro Ala
                230
His Ala Arg Cys Gln Trp Val Leu Arg Gly Asp Ala Asp Ser Val
                245
                                     250
Leu Ser Leu Thr Phe Arg Ser Phe Asp Val Ala\Pro Cys Asp Glu
                260
                                     265
His Gly Ser Asp Leu Val Thr Val Tyr Asp Ser Lau Ser Pro Met
                275
                                     280
Glu Pro His Ala Val Val Arg Leu Cys Gly Thr Phe Ser Pro Ser
                290
Tyr Asn Leu Thr Phe Leu Ser Ser Gln Asn Val Phe Leu Val Thr
                305
                                     310
Leu Ile Thr Asn Thr Gly Arg Arg His Leu Gly Phe Glu Ala Thr
                             SEQ-11
```

∖Phe Gln Leu Pro Lys Met Ser Ser Cys Gly Gly Val Leu Ser Asp Thr Gln Gly Thr Phe Ser Ser Pro Tyr Tyr Pro Gly His Tyr Pro Pro Asn Ile Asn Cys Thr Trp Asn Ile Lys Val Pro Asn Asn Arg Asn Val Lys Val Arg Phe Lys Leu Phe Tyr Leu Val Asp Pro Asn Val Pro Val Gly Ser Cys Thr Lys Asp Tyr Val Glu Ile Asn Gly Glu Lys Oly Ser Gly Glu Arg Ser Gln Phe Val Val Ser Ser Asn Ser Ser Ly& Ile Thr Val His Phe His Ser Asp His Ser Tyr Thr Asp Thr Gly Rhe Leu Ala Glu Tyr Leu Ser Tyr Asp Ser Asn Asp Pro Cys Pro Gly Met Phe Met Cys Lys Thr Gly Arg Cys Ile Arg Lys Glu Leu Arg Cys Asp Gly Trp Ala Asp Cys Pro Asp Tyr Ser Asp Glu Arg Tyr Cys\Arg Cys Asn Ala Thr His Gln Phe Thr Cys Lys Asn Gln Phe Cys Lys Pro Leu Phe Trp Val Cys Asp Ser Val Asn Asp Cys Gly Asp Gly Ser Asp Glu Glu Gly Cys Ser Cys Pro Ala Gly Ser Phe Lys Cys Ser Asn Gly Lys Cys Leu Pro Gln Ser Gln Lys Cys Asn Gly Lys Asp\Asn Cys Gly Asp Gly Ser Asp Glu Ala Ser Cys Asp Ser Val Asn Val Val Ser Cys Thr Lys Tyr Thr Tyr Arg Cys Gln Asn Gly Leu Cys Leu Ser Lys Gly Asn Pro 80 Glu Cys Asp Gly Lys Thr Asp Cys Ser Asp Gly Ser Asp Glu Lys Asn Cys Asp Cys Gly Leu Arg Ser Phe Thr\Lys Gln Ala Arg Val Val Gly Gly Thr Asn Ala Asp Glu Gly Glu Trp Pro Trp Gln Val Ser Leu His Ala Leu Gly Gln Gly His Leu Cys Gly Ala Ser Leu Ile Ser Pro Asp Trp Leu Val Ser Ala Ala His Cys Phe Gln Asp Asp Lys Asn Phe Lys Tyr Ser Asp Tyr Thr Met Tro Thr Ala Phe Leu Gly Leu Leu Asp Gln Ser Lys Arg Ser Ala Ser Gly Val Gln Glu Leu Lys Leu Lys Arg Ile Ile Thr His Pro Ser Phe Asn Asp Phe Thr Phe Asp Tyr Asp Ile Ala Leu Leu Glu Leu Glu Lys Ser Val Glu Tyr Ser Thr Val Val Arg Pro Ile Cys Leu Pro Asp Ala SEQ-12

```
CICICICIC E E E CICICIC
```

```
725
                                     730 .
Thr His Val Phe Pro Ala Gly Lys Ala Ile Trp Val Thr Gly Trp
                740
                                     745
Gly His Thr Lys Glu Gly Gly Thr Gly Ala Leu Ile Leu Gln Lys
                755
                                     760
Gly Glu Ile Arg Val Ile Asn Gln Thr Thr Cys Glu Asp Leu Met
                770
                                     775
Pko Gln Gln Ile Thr Pro Arg Met Met Cys Val Gly Phe Leu Ser
                                                          795
Gly\Gly Val Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Ser
                800
                                     805
Ser Ala Glu Lys Asp Gly Arg Met Phe Gln Ala Gly Val Val Ser
                815
                                     820
Trp Gly Glu Gly Cys Ala Gln Arg Asn Lys Pro Gly Val Tyr Thr
                830
                                     835
Arg Leu Pro Cys Ser Ser Gly Leu Asp Gln Arg Ala His Trp Gly
Ile Ala Ala Trp Thr Asp Ser Arg Pro Gln Thr Pro Thr Gly Met
                860
                                     865
Pro Asp Met \His Thr Trp Ile Gln Glu Arg Asn Thr Asp Asp Ile
                875
                                     900
Tyr Ala Val Ala Ser Pro Pro Gln His Asn Pro Asp Cys Glu Leu
                                                          920
His Pro
<210>
       11
<211>
       23
<212>
       DNA
<213>
       Artificial sequence
<220>
<221>
      n=Inosine
<222>
       6, 9, 12, 15, 18
       Degenerate oligonucleotide primer
<223>
<400>
                                                            23
tgggtngtna cngcngcnca ytg
<210>
       12
<211>
       20
<212>
       DNA
<213>
       Artificial sequence
<220>
<221>
       n=Inosine
<222>
       3, 6, 9, 12, 18
```

```
<223>
       Degenerate oligonucleotide primer
<400>
       12
arnggneene enswrtence
                                                             20
<210>
       13
<211>
       12
<212>
       PRT
<213>
       Homo sapiens
<220>
<223>
       Fragment of TADG-15
<400>
       13
Leu Phe Arg Asp\Trp Ile Lys Glu Asn Thr Gly Val
                                       10
<210>
       14
<211>
       20
<212>
      DNA
      Artificial sequence
<213>
<220>
<223>
       TADG-15 forward oligonucleotide primer
<400>
atgacagagg attcaggtac
                                                              20
<210>
       15
       20
<211>
<212>
       DNA
<213>
       Artificial sequence
<220>
<223>
       TADG-15 reverse oligonucleotide primer
<400>
       15
gaaggtgaag tcattgaaga
                                                              20
<210>
       16
<211>
       20
<212> DNA
<213>
       Artificial sequence
```

```
<220>
       β-tubulin forward oligonucleotide primer
<223>
<400>
cgcatcaacg tgtactacaa
                                                             20
<210>
       17
<211>
       20
<212>
       DNA
<213>
       Artificial sequence
<220>
<223>
       β-tubulin\reverse oligonucleotide primer
<400>
       17
                                                             20
tacgagetgg tggactgaga
<210>
       18
<211>
       3147
<212>
       RNA
       Artificial sequence
<213>
<220>
<223>
       Antisense of TADG-15
<400>
       18
                                                            50
\uuuuuuuuuu uuuuuuuuua aaaagaaaua\aauuguuuua cccauuuaca
caaauacaca cacugaaguc cacccuggga gcugguaaaa caauuucagu
                                                           100
cucagacceg ucuguuuucc aggguccucc gagccugggc uuccucaaga
                                                           150
gcguggccca agggccccac agcccagauc cggcagcccc accaccuuca
                                                           200
                                                           250
cugaggagge uccgaageue eguuccegeu geukeuuaea gacaggggag
                                                           300
gcagauauac acaaacgcgc cucggcccag cuuggggcug gcgggggagg
cuququcuuc aaaccuuugc ccccaguugg gucaglagaa ccaccagugu
                                                           350
ccuccccuuc uaccucccag cuccacuuug gaggcugagg aagcgagagg
                                                           400
uuuucuaggc agauuuggag cccuggagau ugaguucaca guguauguuc
                                                           450
ugggggcgcu ggugcaguca gcgguccagu cuccagcc\ug caggcgugca
                                                           500
                                                           550
cacuggggug gacgaugggu ggcccgcag guguacacal uuggguggcc
ccggccccua uaccccagug uucucuuuga uccagucccg\aaacagaggg
                                                           600
agecuugugu acacgecugg cuuguuccuc ugagegeage cuucuccea
                                                           650
gcucaccaca coggocugga agaucogoco aucogocuco akgouggaca
                                                           700
gggguccccc ggaaucaccc uggcaggagu ccacgccgcc gclugaggaag
                                                           750
cccacgcaca ucaugcgcgg cgugaucugc ugcggcagga ggulucucgca
                                                           800
                                                           850
gguggucugg uugaugacgc ggaucucacc cuuuugcagg aucagcgcgc
                                                           900
cagugecuce auacugggug uguceceage eegugaceea gauggkeuug
ccggcaggga agacauggga ggcguccggc aggcagaugg gccgca&cau
                                                           950
ggagcuguac ucugcegguu ucuccagcuc cagcagegeg augucauagu
                                                          1000
cgaaggugaa gucauugaag aagggguggg agaugaugcg cuugagcc/lg
                                                          1050
```

egeueeugea eeceagggge geugegeugg eueugguegu geaageeeag 1100 gaaggccguc cacugcgugg ggucugagua ccugaauccu cugucaucga 1150 1200 uguagcagug ugcggcagag accagccagu ugggagagau gagggaagca ccgdagaugu ggcccuggcc cagagcaugc aggcuuaccu gccagggcca 1250 cuegêçeuea ueegeaueeg ugeeceeaae aacaegagee ugueueguga 1300 augacègcag cccacagucg caguccuucu caucugagcc gucgcuacag 1350 uccucculuce egucacacue aggguugece uugeucaage agageecauu 1400 gaggcagègg uagguguu ugguacaagu gacgacguuc accuuggggc 1450 aggaggecuc gueggaeeeg uceecacagu egueeuueee auugeaeuge 1500 1550 uggcuuuucg agaggcacuu cccauuggaa caccugaagg ucugggccgg 1600 acaacugcac ccugcucgu cgcuguuguc uccgcagucg uucacacugu cgcagaccca jaagaggggc uugcagaacu uguucuugca cgugaacugg 1650 uggeeggegu egeaacugea guugageuea uegeuguggu eggugeague 1700 ggeccageca ucàcagegea geueeuuceg gauacacege ecegugegge 1750 1800 acgugaacug cccdgggcau gggucacugg agucguagga gagguauuca gcuaagaagc cggugucggu guaggacuga ucugagugga agcgaacugu 1850 1900 gaucuuguug cuguugcugg ugacgacgaa cugggaccuc ucuccgcagu auuucuccc auugaukucc acguaguccu uggggcaggu gcccgcaggc 1950 acgccgggcu ccagcaggua gaagaauuug aagcucaccu ucacaugcug 2000 2050 guuguuggge accucaaugu uccaugugca gucaauguug gguggguagu ggccugggua guaggggcug uugaauguce ccugggcuuu acguaagcgg 2100 2150 ccuccacage ugcucauccu aggcageugg aagaaggugg ccucaaagee gggaugccgc cgcucagugu \ugguuaucag ugugaugagc aggacguucu 2200 gggaggagug gaaggucagg uuguaggagg gaggguaggu gccacacaac 2250 ugeaccaggg cguggggcuc cauggggcuc aggguguugu acaccgucac 2300 2350 cagguegeug cegegeuegu egàaggaege aaggueaaag eugeggaagg ugaggeucag cacugagueg gegûceecec geagggeeca cuggeagegg 2400 2450 gcaugagcgg gguaggggcu gucagggaag ccgggcgugg ugaagcgcau cagcuccaca ccgcgggcgu gcaggdcaaa gcugcagcug uuguccuggg 2500 2550 uccucuguac uguuuuggag uccgugaga aagccaccac ugaggugacc 2600 acaaaggacu ucagggagcg cgcccgc@gg ggcagcauga cuacgcgcuc 2650 cueggeeaug aegegeuegg ceueeueeac eaggugeuge gggaugeuga 2700 acucagacca guaguaggcg augacgcugd ccucgcugaa ggccgucaca gccgacuccu ugugguaggg gcccaggaau \ggacuccgc uguacagcag 2750 2800 cuucagegeg uccuucaceu ugeuggeeag gkuuacaaae ucaguggagu 2850 uggaguucuc guaggcaucc acaaaauucu caluugugau ccucauguag 2900 ccauugaaga ccuucuggac acgcacgucc cgghacugca aaugccacac 2950 caggaageeg auccecagea agaceaagag gagg&egaue ageaeggeug ccagcaccac ccagcgcccc gggccaugcu uuuccaccuu cuugacguug 3000 uugacuggca ggaacuccac gccuuccucc aagccauqua cuuucucgug 3050 3100 ccgggaguug uacuugaguc ccgcgccgaa guccuucggg cccccuccgc ccuugcgggc ccgaucgcuc cccaugguac cccgaggccg cucuuga 3147

<210> 19

<211> 9

<212> PRT

<213> Homo sapiens

<220>

<223> Residues 68-76 of the TADG-15 protein

<400> 19

<212>

PRT

```
Val Leu Gly Ile Gly Phe Leu Val
<210>
       20
<211>
<212>
       PRT
<213>
       Homo sapiens
<220>
<223>
      Residues\126-134 of the TADG-15 protein
<400>
       20
Leu Leu Tyr Ser Gl\( \) Val Pro Phe Leu
       21
<210>
       9 .
<211>
<212>
       PRT
<213>
       Homo sapiens
<220>
       Residues 644-652 of the TADG-15 protein
<223>
</400>
Ser Leu Ile Ser Pro Asn Trp Leu Xal
<210>
       22
<211>
<212>
       PRT
<213>
       Homo sapiens
<220>
<223>
       Residues 379-387 of the TADG-15 protein
<400>
       22
Lys Val Ser Phe Lys Phe Phe Tyr Leu
                   5
<210>
       23
<211>
```

```
DOLETEL TOPO
```

```
<213>
       Homo sapiens
<220>
<223>
       Residues 386-394 of the TADG-15 protein
<400>
       23
Tyr Leu Leu\Glu Pro Gly Val Pro Ala
<210>
       24
<211>
       9
<212>
       PRT
<213>
       Homo sapiens
<220>
<223>
       Residues 257-265 of the TADG-15 protein
<400>
Ser Leu Thr Phe Arg Ser\Phe Asp Leu
<210>
       25
<211>
<212>
       PRT
≮213>
       Homo sapiens
<220>
<223>
       Residues 762-770 of the TADG-15 protein
<400>
       25
Ile Leu Gln Lys Gly Glu Ile Arg Val
                  5
<210>
       26
<211>
<212>
       PRT
<213>
      Homo sapiens
<220>
<223>
       Residues 841-849 of the TADG-15 protein
<400>
       26
Arg Leu Pro Leu Phe Arg Asp Trp Ile
```

5

```
DOLUTEL TOROGO
```

<220>

```
<210>
      27
       9
<211/1>
<212×
       PRT 
<213>
      Homo sapiens
<220>
<223>
       Residues 64-72 of the TADG-15 protein
<400>
Gly Leu Leu\Leu Val Leu Leu Gly Ile
<210> 28
<211>
       9
<212>
       \mathtt{PRT}
<213>
       Homo sapiens
<220>
       Residues 57-65 of the TADG-15 protein
<223>
<400>
       28
Val Leu Ala Ala Val Leu Ale Gly Leu
√210>
₹211>
<212>
      PRT
<213>
       Homo sapiens
<220>
<223>
       Residues 67-75 of the TADG-15 protein
<400> 29
Leu Val Leu Leu Gly Ile Gly Phe Leu
<210>
       30
<211>
<212>
       PRT
<213>
       Homo sapiens
```

```
COCHUL ETHIOD
```

```
<223>
       Residues 379-387 of the TADG-15 protein
<400>
        30
Lyk Val Ser Phe Lys Phe Phe Tyr Leu
<210>
<211>
 <212>
       PRT
<213>
       Homò sapiens
<220>
· <223>
       Residues 126-134 of the TADG-15 protein
<400> 31
Leu Leu Tyr Ser Gly Val Pro Phe Leu
<2:10>
        32
<211>
<212>
       PRT
<213>
       Homo sapiens
<220>
≮223>
       Residues 88-96 of the TADG-15 protein
 <400>.
        32.
Lys Val Phe Asn Gly Tyr Met Arg Ile
<210>
       33
<211>
        9
<212>
       PRT
<213>
       Homo sapiens
<220>
<223>
       Residues 670-678 of the TADG-15 protein
<400>
        33
Thr Gln Trp Thr Ala Phe Leu Gly Leu
```

<210> 34

```
<u>nguala ingu</u>ga
```

```
<211>
   <21,2>
          PRT
   <213>
          Homo sapiens
   <220>
   <223>
          Residues 119-127 of the TADG-15 protein
   <400>
   Lys Val L\u00eds Asp Ala Leu Lys Leu Leu
                     - 5
   <210>
          35
   <211>
   <212>
          PRT
   <213>
          Homo sapiens
   <220>
   <223>
          Residues 60-68 of the TADG-15 protein
   <400>
          35
   Ala Val Leu Ile Gly Leu Leu Val
   <210>
          36
(N <211>
   <212>
          PRT
   <213>
          Homo sapiens
   <220>
          Residues 62-70 of the TADO 15 protein
   <223>
   <400>
          36
   Leu Ile Gly Leu Leu Leu Val Leu Leu
          37
   <210>
   <211>
   <212>
          PRT
   <213>
          Homo sapiens
   <220>
   <223>
          Residues 57-65 of the TADG-15 protein
   <400>
          37
```

```
Val Leu Ala Ala Val Leu Ile Gly Leu
<210>
       38
<211>
<212>
       PRT
<213>
      Momo sapiens
<220>
<223>
      Residues 61-69 of the TADG-15 protein
<400>
       38
Val Leu Ile Gly Leu Leu Val Leu
<210>
       39
<211>
<212>
       PRT
       Homo sapiens
<213>
<220>
       Residues 146-154 of the TADG-15 protein
<223>
<400>
Phe Ser Glu Gly Ser Val \Te Ala Tyr
<210>
       40
<211>
<212>
       PRT
<213>
       Homo sapiens
<220>
<223> Residues 658-666 of the TADG-15 protein
<400>
       40
Tyr Ile Asp Asp Arg Gly Phe Arg Tyr
<210>
       41
<211>
<212>
       PRT
```

```
<213>
      Homo sapiens
<220>
<2233
       Residues 449-457 of the TADG-15 protein
<400>
       41
Ser Ser Asp Pro Cys Pro Gly Gln Phe
<210>
       42
<211>
       9
<212>
       PRT
<213>
       Homo sapiens
<220> -
<223>
       Residues 401-409 of the TADG-15 protein
<400>
       42
Tyr Val Glu Ile Asn\Gly Glu Lys Tyr
<210> 43
≰211>,
<212>
       PRT
<213>
       Homo sapiens
<220>
       Residues 387-395 of the TADG-15 protein
<223>
<400>
       43
Leu Leu Glu Pro Gly Val Pro Ala Gly
<210>
       44
<211> 9
<212>
       PRT
       Homo sapiens
<213>
<220>
<223>
       Residues 553-561 of the TADG-15 protein
<400>
Gly Ser Asp Glu Ala Ser Cys Pro Lys
```

5

```
<210>
      45
<211>
<212>
       PRT
<213>
       Homo sapiens
<220>
<223>
       Residues 97-105 of the TADG-15 protein
<400>
       45
Thr Asn Glu Ash Phe Val Asp Ala Tyr
<210>
       46
       9
<211>
<212>
     PRT
<213>
       Homo sapiens
<220>
       Residues 110-118 of the TADG-15 protein
<223>
<400>
       46
Ser Thr Glu Phe Val Ser Leu Ala Ser
<210>
       47
<211>
<212>
       PRT
<213>
      Homo sapiens
<220>
       Residues 811-819 of the TADG-15 protein
<223>
<400>
       47
Ser Val Glu Ala Asp Gly Arg Ile Phe
<210>
       48
<211>
<212>
       PRT
<213>
       Homo sapiens
<220>
```

```
DOLLETE TOPOO
```

```
Residues 666-674 of the TADG-15 protein
<400>
       48
Tyr Ser\Asp Pro Thr Gln Trp Thr Ala
                  5
<210>
       49
<211>
<212>
       PRT
<213>
       Homo sapiens
<220>
<223>
       Residues 709-717 of the TADG-15 protein
<400>
       49
Asp Tyr Asp Ile Ala Leu Leu Glu Leu
<210>
       50
<211>
<212>
       PRT
<213>
       Homo sapiens
<220>
<223>
       Residues 408-416 of the TADG-15 protein
<400>
       50
Lys Tyr Cys Gly Glu Arg Ser Gln\Phe
<210>
       51
<211>
       9
<212> PRT
<213>
       Homo sapiens
<220>
<223> Residues 754-762 of the TADG-15 protein
<400>
       51%
Gln Tyr Gly Gly Thr Gly Ala Leu Ile
<210> 52
```

```
<211>
<212>
       PRT
 <213≯
       Homo sapiens
<220>
<223>
       Residues 153-161 of the TADG-15 protein
<400>
Ala Tyr Tyr Trp Ser Glu Phe Ser Ile
<210>
       53
<211>
<212> PRT
<213>
       Homo sapièns
<220>
<223>
       Residues 722\730 of the TADG-15 protein
<400>
       53
Glu Tyr Ser Ser Met Va\lambda Arg Pro Ile
                   5
 ≮210>
        54
<211>
<212>
       PRT
<213>
       Homo sapiens
<220>
<223> Residues 326-334 of the TADG-15 protein
<400>
Gly Phe Glu Ala Thr Phe Phe Gln Leu
                   5
<210>
       55
<211>
<212>
       PRT
<213>
       Homo sapiens
<220>
<223>
       Residues 304-312 of the TADG-15 protein
<400>
```

Thr Rhe His Ser Ser Gln Asn Val Leu

5

```
<210> . 56
```

<211> 9

<212> PRT

<213> Homo sapiens

<220>

<223> Residues\707-715 of the TADG-15 protein

<400> 56

Thr Phe Asp Tyr Asp Ile Ala Leu Leu

<210> 57

<211> 9

<212> PRT

<213> Homo sapiens

<220>

<223> Residues 21-29 of the TADG-15 protein

<400> 57

Lys Tyr Asn Ser Arg His Glu Lys\Val

5

<210> 58

<211> 9

<212> PRT

<213> Homo sapiens

<220>

<223> Residues 665-673 of the TADG-15 protein

<400> 58

Arg Tyr Ser Asp Pro Thr Gln Trp Thr

<210> 59

<211> 9

<212> PRT

```
<213> Homo sapiens
<220>
<223> Residues 686-694 of the TADG-15 protein
<400>
Ala Pro Gly Val Gln Glu Arg Arg Leu
<210>
       60
<211>
<212>
      PRT
<213>
      Homo sapi∕ens
<220>
<223>
       Residues 12\20 of the TADG-15 protein
<400>
       60
Gly Pro Lys Asp Phe Gly Ala Gly Leu
<210>
       61
<211>
       9 .
<212>
       PRT
<213>
       Homo sapiens
<220>
<223> Residues 668-676 of the TADG-15 protein
<400> 61
Asp Pro Thr Gln Trp Thr Ala Phe Leu
<210>
       62
<211>
<212>
      PRT
<213> Homo sapiens
<220>
       Residues 461-469 of the TADG-15 protein
<223>
<400>
       62
Thr Gly Arg Cys Ile Arg Lys Glu Leu
```

5

<220>

```
<210>
      63
<211>
       9 .
<212>
       PRT
       Homo sapiens
<213>
<220>
<223> Residues 59-67 of the TADG-15 protein
<400>
Ala Ala Val Leu Ile Gly Leu Leu
<210>
       64
<211>
<212>
       PRT
<213>
       Homo sapiens
<220>
       Residues 379-387\of the TADG-15 protein
<223>
<400>
       64
Lys Val Ser Phe Lys Phe Phe Tyr Leu
<210>
       65
<211>
<212>
       PRT
<213>
       Homo sapiens
<220>
       Residues 119-127 of the TADG-15 protein
<223>
<400>
       65
Lys Val Lys Asp Ala Leu Lys Leu Leu
<210>
       66
<211>
<212>
       PRT'
<213>
       Homo sapiens
```

```
<223> Residues 780-788 of the TADG-15 protein
<400>
Leu Pro Gla Gln Ile Thr Pro Arg Met
<210>
      67
<211>
      9
<212>
      PRT
<213>
      Homo sapiens
<220>
<223> Residues 67-\nabla5 of the TADG-15 protein
<400>
      67,
Leu Val Leu Gly I\( e Gly Phe Leu
<210>
       68
<211>
<212>
      PRT
<213>
      Homo sapiens
<220>
      Residues 283-291 of the TADG-15 protein
<223>
<400>
       68
Ser Pro Met Glu Pro His Ala Leu Val
<210>
      69
<211>
<212>
      PRT
<213>
      Homo sapiens
<220>
<223> Residues 12-20 of the TADG-15 protein
<400>
Gly Pro Lys Asp Phe Gly Ala Gly Leu
<210> 70
```

```
<2\11>
<212>
       PRT
<213≯
       Homo sapiens
<220>
<223>
       Residues 257-265 of the TADG-15 protein
<400>
Ser Leu Thr Phe Arg Ser Phe Asp Leu
<210>
       71
<211>
<212>
       PRT ·
<213>
       Homo sapiens
<220>
<223>
       Residues 180-188 of the TADG-15 protein
<400>
       71
Met Leu Pro Pro Arg Ala Arg Ser Leu
<210>
       72
<211>
       9
<212>
       PRT
<213>
      Homo sapiens
<220>
       Residues 217-225 of the TADG-15 protein
<223>
<400>
       72
Gly Leu His Ala Arg Gly Val Glu Leu
<210>
       73
<211>
<212>
       PRT
<213>
       Homo sapiens
<220>
<223>
       Residues 173-181 of the TADG-15 protein
<400>
       73
```

ļ.

```
<210> \ 74
<211>
<212>
       | PRT
<213>
       \Homo sapiens
<220>
<223>
      Residues 267-275 of the TADG-15 protein
<400>
       74
Ser Cys Asp Glu Arg Gly Ser Asp Leu
<21Ó>
       75
<211>
       9
<212>
       PRT
<213>
       Homo sapiens
<220>
       Residues 567-575 of the TADG-15 protein
<223>
<400>
       7.5
```

```
<210>
       76
<211>
       9
<212>
       PRT
<213>
       Homo sapiens
<220>
```

Residues 724-732 of the TADG-15\protein <223> <400> 76

Ser Ser Met Val Arg Pro Ile Cys Leu

Cys Thr Lys His Thr Tyr Arg Cys Leu

<210> 77 <211> 9 <212> PRT

```
<213>, Homo sapiens
<220>
<223>
      Residues 409-417 of the TADG-15 protein
<400>
Tyr Cys Gly Glu Arg Ser Gln Phe Val
<210>
       78
<211>
<212>
       PRT
<213>
       Homo sapiens
<220>
       Residues 495\503 of the TADG-15 protein
<223>
<400>
       78
Thr Cys Lys Asn Lys Phe Cys Lys Pro
<210>
       79
<211>
<212>
       PRT
<213>
       Homo sapiens
<220>
<223> Residues 427-435 of the TADG-15 protein
<400>
       79
Val Arg Phe His Ser Asp Gln Ser Tyr
<210>
       80
<211>
<212>
       PRT
<213>
      Homo sapiens
<220>
<223>
       Residues 695-703 of the TADG-15 protein
<400>
Lys Arg Ile Ile Ser His Pro Phe Phe
```

```
A corpus topoo
```

```
<210> \ 81
<211>
<212>
       PRT
<213>
       Homo sapiens
<220>
<223>
       Residues &64-672 of the TADG-15 protein
<400>
Phe Arg Tyr Ser Asp\Pro Thr Gln Trp
<21'0>
<211>
<212>
       PRT
><213> · Homo sapiens
<220>
       Residues 220-228 of the TADG-15 protein
<223>
<400>
       82
Ala Arg Gly Val Glu Leu Met Arg Phe
<210>
       83
<211>
<212>
       PRT
<213>
       Homo sapiens
<220>
       Residues 492-500 of the TADG-15 protein
<223>
<400>
       83
His Gln Phe Thr Cys Lys Asn Lys Phe
<210>
       84
<211>
<212>
       PRT
<213>
       Homo sapiens
<220>
```

```
<223>
       Residues 53-61 of the TADG-15 protein
<400>
       84
Gly\Arg Trp Val Val Leu Ala Ala Val
<210>
       \85
<211>
<212>
       PRT
<213>
       Homo sapiens
<220>
<223>
       Residues 248-256 of the TADG-15 protein
<400>
       85
Leu Arg Gly Asp Ala Asp Ser Val Leu
                   5
<210>
       86
·<211>
      . 9
<212>
       PRT
<213>
      Homo sapiens
<220>
<223>
       Residues 572-580 of the TADG-15 protein
<400>
       86
Tyr Arg Cys Leu Asn Gly Leu Cys Leu
<210>
       87
<211>
       9
<212>
      PRT
<213>
      Homo sapiens
<220>
<223>
       Residues 692-700 of the TADG-15 protein
<400>
       87
Arg Arg Leu Lys Arg Ile Ile Ser His
                   . 5
<210> 88
```

<220> <223>

<400>

91

```
<211>
<212>
<213>
       Homo sapiens
<220>
<223>
       Residues 24-32 of the TADG-15 protein
<400>
Ser Arg His Gl\(\dagger\) Lys Val Asn Gly Leu
                   5
<210>
       89.
<211>
<212>
       PRT
<213> Homo sapiens
<220>
       Residues 147-155 of the TADG-15 protein
<223>
<400>
       89
Ser Glu Gly Ser Val Ile Ala Tyr Tyr
                   5
<210>
       90
<211>
       9
<212>
       PRT
<213>
       Homo sapiens
<220>
       Residues 715-723 of the TADG-15 protein
<223>
<400>
       90
Leu Glu Leu Glu Lys Pro Ala Glu Tyr
<210>
       91
<211>
       9
<212>
       PRT
<213>
       Homo sapiens
```

SEQ−36

Residues 105-113 of the TADG-15 protein

Tyr Glu Asn Ser Asn Ser Thr Glu Phe

5

```
<210> 92
```

<211> 9

<212> PRT

<213> Homo sapiens

<220>

<223> Residues 14-22 of the TADG-15 protein

<400> 92

Lys Asp Phe Gly Ala Gly Leu Lys Tyr

5

<210> 93

<211> 9

<212> PRT

<213> Homo sapiens

<220>

<223> Residues 129-137 of the TADG-15 protein

<400> 93

Ser Gly Val Pro Phe Leu Gly Pro Tyr

5

<210> 94

<211> 9

<212> PRT

<213> Homo sapiens

<220>

<223> Residues 436-444 of the TADG-15 protein

<400> 94

Thr Asp Thr Gly Phe Leu Ala Glu Tyr

5

<210> 95

<211> 9

<212> PRT

```
<213> Homo sapiens
<220>
<223>
       Residues 766-774 of the TADG-15 protein
<400>
       95
Gly Glu Ile Arg Val Ile Asn Gln Thr
<210>
       96
<211>
       9
<212>
       PRT
<213>
       Homo sapièns
<220>
<223>
       Residues 402-410 of the TADG-15 protein
<400>
       96
Val Glu Ile Asn Gly G\u00edu Lys Tyr Cys
<210>
       97
<211>
<212>
       PRT
<213>
       Homo sapiens
<220>
<223> Residues 482-490 of the TADG-15 protein
<400>
       97
Asp Glu Leu Asn Cys Ser Cys Asp Alà
                   5
<210>
       98
<211>
<212>
       PRT
<213>
       Homo sapiens
```

Ш

Ū

<220> <223>

<400>

Arg Asp Val Arg Val Gln Lys Val Phe

Residues 82-90 of the TADG-15 protein